1	DECLAR	ATION	PATENT APPLIC	ATION AND APPOI	NT T O	ATTORNEY DOC	KET NO.: QEDI-0 001-1
plural names applicable) e	s a below-named in believe that I am the sare listed below) on titled: OBJECT-B	e original, fir of the subject ASED NUMER	eby declare that my re st and sole inventor (i matter which is claim	sidence, post office add fonly one name is listed ed and for which a pate IE, the specification of v	d below) or are	enship are as s n original, first n the invention	tated below next to
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	applicable).		_ as Application Ser	ial No.	, and was	amended on	(if
	was filed on _	(ii appiicao	e).	Application (PCT)			
application in United States	nent(s) referred to n accordance with a Code § 119 of an	above. I ac <i>Title 37, Cod</i> y foreign app	knowledge the duty be of Federal Regulation lication(s) for patent of rtificate having a filing	the above-identified sp to disclose information tons, § 1.56(a). I herebor inventor's certificate g date before that of the GNAPPLICATION(S)	n which is m by claim forei listed below:	naterial to the gn priority be	examination of this nefits under <i>Title 35</i> , identified below and
	Number		COUNTRY	DAY/MONTH/YE	CAR FILED	Priori	TY CLAIMED
						Yes	□ No
						Yes	□ No
application(s) application is § 112, I acknow	not disclosed in the owledge the duty	Inited States at/those prior to disclose n	of America listed be application(s) in the r naterial information a	Code, § 120 of any Un elow and, insofar as th manner provided by the s defined in Title 37, (ational or PCT internati	e subject ma first paragrap Code of Fede	tter of each on the of Title 35, exal Regulation	f the claims of this United States Code,
Ai	PPLICATION NUMBI	ER	FILING DATE		STATUS	(Patented, Pendi	ng or Abandoned)
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made are belief made are punis statements may POWE	shable by fine, or in y jeopardize the val	further that nprisonment, idity of the ap	these statements were or both, under Section opplication or any pater tereby appoint as my	(our) attorneys, with	dge that willfing United States full powers of	ul false statem s Code, and the	ents and the like so at such willful false
orosecute this a Number 35,20	application and trar	sact all busir	ness in the Patent and	Trademark Office conn	ected therewit	th: Ajay A. Ja	gtiani, Registration
Send correspor	103	GTIANI & Ass 379-B Democ rfax, Virginia	cracy Lane	Telephone calls to:	Ajay A. Jagti: (703) 591-26		
	<u> </u>		See following pages fo	or additional joint inventors.			
Full Name of Fi	irst or Sole Inventor , Evan G.	, <u> </u>		Citizenship United States			

Full Name of First or Sole Inventor BURFIELD, Evan G. Residence Address - Street 9852 Fairfax Square #225		Citizenship United States
		Post Office Address Street QED Innovations, 4013 Williamsburg Court
City Fairfax		City Fairfax
State or Country Virginia	Zip 22031	State or Country Zip Viriginia 22032
DATE 10/13/98		SIGNATURE & BAQ

DECLARATION . PATENT APPLICATION AND APPOINTMENT OF ATTORNEY

Page 2

Full Name of Additional Joint Inventor CHANG, Chia Chen		Citizenship United States	
Residence Address - Street 804 Lawton Street		Post Office Address Street QED Innovations, 4013 Williamsburg Court	
City McLean		City Fairfax	
State or Country Virginia	Zip 22101	State or Country Zip Virginia 22032	
DATE 10/13/98		SIGNATURE ()	

Full Name of Additional Joint DRISSEL, Mark	Inventor	Citizenship United States		
Residence Address – Street 6314 Kiteline Court		Post Office Address Street QED Innovations, 4013 W	Post Office Address Street QED Innovations, 4013 Williamsburg Court	
City Columbia		City Fairfax		
State or Country Maryland	Zip 21044	State or Country Virginia	Zip 22032	
DATE 10/13/98		SUGUSTURE Wissel		

Full Name of Additional Joint Inventor EICHLER, Matthew Residence Address - Street 2629 Washington Blvd.		Citizenship United States Post Office Address Street QED Innovations, 4013 Williamsburg Court	
State or Country Virginia	Zip 22201	State or Country Zip Virginia 22032	
DATE 10/13/98		SIGNATURE SIGNATURE	2

Full Name of Additional Joint Inventor GARRETT, Richard		Citizenship United States	
Residence Address - Street 9852 Fairfax Square #225		Post Office Address Street QED Innovations, 4013 Williamsburg Court	
City Fairfax		City Fairfax	
State or Country Virginia	<i>Zip</i> 22031	State or Country Zip Virginia 22032	
DATE 10/13/98		SIGNATURE Rich J Hawell	

See following pages for additional joint inventors.

DECLARATION FOR PATENT APPLICATION AND APPOINTME OF ATTORNEY

Page 2

Full Name of Additional Joint Inventor GROAT, Robert Residence Address - Street 45862 Aberdeen Lane		Citizenship United States
		Post Office Address Street QED Innovations, 4013 Williamsburg Court
City Valley Lee		City Fairfax
State or Country Maryland	<i>Zip</i> 20692	State or Country Zip Virginia 22032
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Full Name of Additional Joint Inventor KIPP, Neill Residence Address - Street 319 New Kent Road City Blacksburg		Citizenship United States Post Office Address Street QED Innovations, 4013 Williamsburg Court City Fairfax					
				State or Country Virginia	<i>Zip</i> 24060	State or Country Virginia	Zip 22032
				Date 10/13/98		SIGNATURE	

Full Name of Additional Joint Inventor RAPP, Perry Russell		Citizenship United States	
Residence Address - Street 48278 Keel Drive		Post Office Address Street QED Innovations, 4013 Williamsburg Court	
City Lexington Park		City Fairfax	
State or Country Maryland	<i>Zip</i> 20653	State or Country Virginia	Zip 22032
DATE 10/13/98		SIGNATURE	

Full Name of Additional Joint Inventor		Citizenship		
Residence Address - Street		Post Office Address Street	Post Office Address Street	
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See following pages for additional joint inventors.

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ATTORNEY DOCKET No.: NIST-0006-1 DECLARATION FOR PATENT APPLICATION AND APPOINTMENT OF ATTORNEY

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Full Name of Additional John Inventor KIPP, Nelli	Chizmille United States
Residence Address – Street 319 New Kent Road	Post Office Address Street QED Innovations, 4013 Williamsburg Court
Cty Blacksburg	Cir Fairfax
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State or Country 22p Maryland 20653	State or Country Zip Virginia 22032
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Pull Name of Additional Joint Inventor	Circumship
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DATE	SIGNATURE

See following pages for additional Joins (reventors.

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ATTORNEY DOCKET No.: NIST-0006-1 DECLARATION FOR PATENT APPLICATION AND APPOINTMENT OF ATTORNEY Page Z

Pull Name of Additional Joint Javentor GROAT, Robert	Chizenship United States
Residence Address - Street 45862 Aberdeen Lanc	Past Office Address Servet QED Innovations, 4013 Williamsburg Court
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Pull Name of Additional Joint Inventor RAPP, Porry Russell	Cutzenskip United States
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Cty Ledgeton Park	Cir Fairfax
State or Country Zip Maxyland 20653	State or Country Zip Virginia Z1032
ZATE 10/13/98	Standards March
Full Name of Additional Total Inventor	Chlorolip
Residence Address - Street	Post Office Address Street
Cap	Cuy
State or Country Zip	State or Country Zip
Datz	SIGNATURE

See following puges for additional John inventors.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
BURFIELD, et al.)	
Serial Number: to be Assigned)	Art Unit:
Filed: Concurrently)	Examiner:
For: OBJECT-BASED NUMERIC ANALYSIS ENGINE)	

Assistant Commissioner for Patents Washington, D.C. 20231

ASSOCIATE POWER OF ATTORNEY

Sir:

I hereby appoint Mark Guttag, Registration Number 33,057, as my associate attorney in the above-captioned application, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent and to transact all business in the Patent Office connected therewith.

However, please continue to address all future communications to the undersigned attorney at the following:

Ajay A. Jagtiani
JAGTIANI & ASSOCIATES
Democracy Square Business Center
10379-B Democracy Lane
Fairfax, Virginia 22030

Respectfully submitted,

Registration Number 35,205

JAGTIANI & ASSOCIATES
Democracy Square Business Center
10379-B Democracy Lane
Fairfax, Virginia 22030
(703) 591-2664

October 9, 1998

Applicant or Patientes	BI REIELD, et al.	Docket st	Swart Brains QEDI-0001-1
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thereby declare the sate				
Same of Concer	n: QED innovarions			
Address 4013 V	VIIIIamsburg Court, Fa _{rfaX} , V _A 22032			
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I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue lee or any maintenance fee due after the date on which status as a small entity is no longer appropriate 13. CFR 1.28thii. Thereby declare that all statements made herein of my own knowledge are true and that all statements made on information and the tree declare that all statements made herein of my own knowledge are true and that all statements made on information and the content of the paying that these statements were made with the knowledge that willful false statements and that				
I hereby declar belief are belief like so made at such willful to youthed statutu	re punishable by fine, or imprisonment, or both, und se statements may teopardize the validity of the app	edge are true and the mode with the known rection 1001 of Totalication, any parent	whelet the	willful false statements and the he United States Code, and that reon, or any patent to which the
नः व <u>्यासम्बद्ध</u> ाः अस्तरम्		10/13	198	
Thia Chen Chang	2. President	Δ	~ 1	-
4013 Williamsbu	irg Court, Fairfax, VA 22032		11/2	

My commission expires:

ASSIGNMENT

WHEREAS, Chia Chen Chang, whose post office to as ASSIGNOR), has invented certain new and useful imp ANALYSIS ENGINE (hereinafter referred to as THE INVENTIO Letters Patent was filed October 15, 1998, Serial Number:	rovements in an ORIECT-RASED NUMERIC
WHEREAS, QED Innovations, whose post offi Fairfax Virginia, (hereinafter referred to as ASSIGNEE), is dinterest in and to the same in the United States and throughout	estrous of acquiring the entire right, title and
NOW, THEREFORE, for good and valuable c acknowledged, we, ASSIGNOR, by these presents do sell, a entire right, title and interest in and to said invention and a America, including any and all United States Letters Pate continuation-in-part and reissue of said application; and the invention throughout the world, including the right to apply for thereof and to claim priority pursuant to rights accorded International Convention and all other available internation right, title and interest in and to any and all patents, pate importation, revalidation patents and inventor certificates whe respect of said invention.	assign and transfer until said ASSIGNEE, the application throughout the United States of ent granted on any division, continuation, entire right, title and interest in and to said or patents and inventor certificates in respect ASSIGNOR under the terms of the Paris al conventions and treaties; and the entire ents of addition, utility models, patents of
ALSO, ASSIGNOR hereby agrees to execute any deconnection with the filing, prosecution and maintenance application(s) or inventor certificate(s) in the United States a including additional documents that may be required to affinivention, all without further consideration. ASSIGNOR also a ASSIGNEE'S expense, to identify and communicate to ASSIGN information concerning the invention that are within ASSIGN further assurances and testimony on behalf of ASSIGNEE that respect of the prosecution, maintenance and defense of any within the terms of this instrument. ASSIGNOR'S obligation ASSIGNOR'S heirs, executors, administrators and other legal rep	of said application or any other patent and in foreign countries for said invention, irm the rights of ASSIGNEE in and to said agrees, without further consideration and at NEE at ASSIGNEE's request documents and OR's possession or control, and to provide lawfully may be required of ASSIGNOR in patent application or patent encompassed ons under this instrument shall extend to
ASSIGNOR hereby authorizes and requests the Commi any and all United States Letters Patent referred to above to As in and to the same, for ASSIGNEE'S sole use and behalf; and representatives and successors, to the full end of the term for w fully and entirely as the same would have been held by ASSIG made.	SSIGNEE of the entire right, title and interest for the use and behalf of ASSIGNEE'S legal hich such Letters Patent may be granted as
Inventor: Chia Chen Chang Address: 804 Lawton Street McLean, Virginia 22101	Signature Date: 10/15/98 SSN.: 578-64-3304 Notarization preferred but not required
State of, City/County of,	, -
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Before me personally appeared and said	لاءيم
acknowledges this instrument to be his (her) free act and deed t	his day of
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My commission expires:

ASSIGNMENT	
WHEREAS, Matthew Eichler, whose post office address Assignor), has invented certain new and useful improve ANALYSIS ENGINE (hereinafter referred to as THE INVENTION). Letters Patent was filed October 15, 1998, Serial Number:	ements in an OBJECT-BASED NUMERIC- for which an application for United States
WHEREAS, QED Innovations, whose post office Fairfax Virginia, (hereinafter referred to as ASSIGNEE), is desiinterest in and to the same in the United States and throughout the same in the United States and the States a	rous of acquiring the entire right title and
NOW, THEREFORE, for good and valuable con acknowledged, we, ASSIGNOR, by these presents do sell, assigntire right, title and interest in and to said invention and application, including any and all United States Letters Patent continuation-in-part and reissue of said application; and the en invention throughout the world, including the right to apply for thereof and to claim priority pursuant to rights accorded A International Convention and all other available international right, title and interest in and to any and all patents, patent importation, revalidation patents and inventor certificates which respect of said invention.	gn and transfer until said ASSIGNEE, the plication throughout the United States of t granted on any division, continuation, tire right, title and interest in and to said patents and inventor certificates in respect ASSIGNOR under the terms of the Paris conventions and treaties; and the entire s of addition, utility models, patents of
ALSO, ASSIGNOR hereby agrees to execute any doctonnection with the filing, prosecution and maintenance of application(s) or inventor certificate(s) in the United States and including additional documents that may be required to affirm invention, all without further consideration. ASSIGNOR also agr ASSIGNEE'S expense, to identify and communicate to ASSIGNOR information concerning the invention that are within ASSIGNOR further assurances and testimony on behalf of ASSIGNEE that la respect of the prosecution, maintenance and defense of any pawithin the terms of this instrument. ASSIGNOR'S obligations ASSIGNOR'S heirs, executors, administrators and other legal representations.	f said application or any other patent d in foreign countries for said invention, in the rights of ASSIGNEE in and to said rees, without further consideration and at E at ASSIGNEE's request documents and the at ASSIGNEE's request documents and the countries of the said with the said to provide a wfully may be required of ASSIGNOR in the said application or patent encompassed a under this instrument shall extend to
ASSIGNOR hereby authorizes and requests the Commission any and all United States Letters Patent referred to above to ASSI in and to the same, for ASSIGNEE's sole use and behalf; and for representatives and successors, to the full end of the term for which fully and entirely as the same would have been held by ASSIGNO made.	GNEE of the entire right, title and interest the use and behalf of ASSIGNEE'S legal ch such Letters Patent may be granted as
	111111
Inventor: Matthew Eichler	Marien
Address: 2629 Washington Blvd., Arlington, Virginia 22201	Signature
At higher, virginia 22201	Date:
	Notarization preferred but not required
State of,	
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Before me personally appeared and said	J
acknowledges this instrument to be his (her) free act and deed this	, and 5day of

ASSIGNMENT

WHEREAS, Mark Drissel, whose post office address ASSIGNOR), has invented certain new and useful improver ANALYSIS ENGINE (hereinafter referred to as THE INVENTION) Letters Patent was filed October 15, 1998, Serial Number:	nents in an OBJECT-BASED NUMERIC- for which an application for United States
WHEREAS, QED Innovations, whose post office Fairfax Virginia, (hereinafter referred to as ASSIGNEE), is designificated in and to the same in the United States and throughout the	rous of acquiring the entire right title and
NOW, THEREFORE, for good and valuable consacknowledged, we, ASSIGNOR, by these presents do sell, assigntier right, title and interest in and to said invention and approximation, including any and all United States Letters Patent continuation-in-part and reissue of said application; and the eninvention throughout the world, including the right to apply for thereof and to claim priority pursuant to rights accorded A International Convention and all other available international right, title and interest in and to any and all patents, patents importation, revalidation patents and inventor certificates which respect of said invention.	gn and transfer until said ASSIGNEE, the plication throughout the United States of granted on any division, continuation, tire right, title and interest in and to said patents and inventor certificates in respect aSSIGNOR under the terms of the Paris conventions and treaties; and the entire so of addition, utility models, patents of
ALSO, ASSIGNOR hereby agrees to execute any doct connection with the filing, prosecution and maintenance of application(s) or inventor certificate(s) in the United States and including additional documents that may be required to affirm invention, all without further consideration. ASSIGNOR also agr ASSIGNEE's expense, to identify and communicate to ASSIGNEE information concerning the invention that are within ASSIGNOR further assurances and testimony on behalf of ASSIGNEE that lar respect of the prosecution, maintenance and defense of any pawithin the terms of this instrument. ASSIGNOR'S obligations ASSIGNOR'S heirs, executors, administrators and other legal representations.	said application or any other patent in foreign countries for said invention, the rights of ASSIGNEE in and to said ees, without further consideration and at at ASSIGNEE's request documents and so possession or control, and to provide wfully may be required of ASSIGNOR in atent application or patent encompassed under this instrument shall extend to
ASSIGNOR hereby authorizes and requests the Commission and all United States Letters Patent referred to above to ASSIGN in and to the same, for ASSIGNEE'S sole use and behalf; and for representatives and successors, to the full end of the term for which fully and entirely as the same would have been held by ASSIGNO made.	GNEE of the entire right, title and interest the use and behalf of Assignee's legal is such Letters Patent may be granted, as it had this assignment and sale not been
Inventor: Mark Drissel Address: 6314 Kiteline Court Columbia, Maryland 21044	Muk Dusiel Signature Date: 10/15/98 SSN.:
State of ,	Notarization preferred but not required
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Before me personally appeared and saidacknowledges this instrument to be his (her) free act and deed this	, andday of
	Notary Public
My commission annives:	1. O. G. F. I. WOLLD

My commission expires:

ASSIGNMENT		
WHEREAS, Richard Garrett, whose post office address Assignor), has invented certain new and useful improvemental Analysis Engine (hereinafter referred to as The Invention) Letters Patent was filed October 15, 1998, Serial Number:	for which an application for United States	
WHEREAS, QED Innovations, whose post office Fairfax Virginia, (hereinafter referred to as ASSIGNEE), is desinterest in and to the same in the United States and throughout to	irous of acquiring the entire right title and	
NOW, THEREFORE, for good and valuable con acknowledged, we, ASSIGNOR, by these presents do sell, assentire right, title and interest in and to said invention and ap America, including any and all United States Letters Paten continuation-in-part and reissue of said application; and the er invention throughout the world, including the right to apply for thereof and to claim priority pursuant to rights accorded A International Convention and all other available international right, title and interest in and to any and all patents, patent importation, revalidation patents and inventor certificates which respect of said invention.	ign and transfer until said ASSIGNEE, the plication throughout the United States of t granted on any division, continuation, natire right, title and interest in and to said patents and inventor certificates in respect ASSIGNOR under the terms of the Paris conventions and treaties; and the entire as of addition, utility models, patents of	
ALSO, ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent application(s) or inventor certificate(s) in the United States and in foreign countries for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's expense, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the invention that are within ASSIGNOR'S possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR'S obligations under this instrument shall extend to ASSIGNOR'S heirs, executors, administrators and other legal representatives.		
ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent referred to above to ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE'S sole use and behalf; and for the use and behalf of ASSIGNEE'S legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.		
Inventor: Richard Garrett Address: 9852 Fairfax Square #225 Fairfax, Virginia 22031	Signature Date: OCT. 15, 1998 SSN.: 330-50-9370 Notarization preferred but not required	
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ASSIGNMENT

WHEREAS, Robert Groat, whose post office address ASSIGNOR), has invented certain new and useful improven ANALYSIS ENGINE (hereinafter referred to as THE INVENTION) Letters Patent was filed October 15, 1998, Serial Number:	nents in an OBJECT-BASED NUMERIC-
WHEREAS, QED Innovations, whose post office Fairfax Virginia, (hereinafter referred to as ASSIGNEE), is desirinterest in and to the same in the United States and throughout the	ous of acquiring the entire right title and
NOW, THEREFORE, for good and valuable consacknowledged, we, ASSIGNOR, by these presents do sell, assigntier right, title and interest in and to said invention and approximation, including any and all United States Letters Patent continuation-in-part and reissue of said application; and the entinvention throughout the world, including the right to apply for patents and to claim priority pursuant to rights accorded A International Convention and all other available international right, title and interest in and to any and all patents, patents importation, revalidation patents and inventor certificates which respect of said invention.	gn and transfer until said ASSIGNEE, the olication throughout the United States of granted on any division, continuation, tire right, title and interest in and to said patents and inventor certificates in respect SSIGNOR under the terms of the Paris conventions and treaties; and the entire of addition, utility models, patents of
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ASSIGNOR hereby authorizes and requests the Commission any and all United States Letters Patent referred to above to ASSIGN in and to the same, for ASSIGNEE'S sole use and behalf; and for representatives and successors, to the full end of the term for which fully and entirely as the same would have been held by ASSIGNO made.	GNEE of the entire right, title and interest the use and behalf of ASSIGNEE'S legal in such Letters Patent may be granted as
Inventor: Robert Groat Address: 45862 Aberdeen Lane Valley Lee, Maryland 20692	Signature Date: 15 78 SSN.: 21580 8493
	Notarization preferred but not required
State of, City/County of,	
Before me personally appeared and said acknowledges this instrument to be his (her) free act and deed this	, andday of
My commission expires:	Notary Public
My commission expires:	•



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10-15-1998 3:11PM FROM

ASSIGNMENT

WHEREAS, QED innovations, whose post office address is 4013 Williamsburg Court, Fairfux Virginia, (hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire right, this and interest in and to the same in the United States and throughout the world;

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, we Assigned, by these presents do sell, assign and transfer until said Assigned, the entire right, title and interest in and to said invention and application throughout the United States of America, including any and all United States Letters Patent granted on any division, continuation, continuation-in-part and reissue of said application; and the entire right, title and interest in and to said invention throughout the world, including the right to apply for patents and inventor certificates in respect thereof and to claim priority pursuant to rights accorded Assignor under the terms of the Paris international Convention and all other available international conventions and treaties; and the entire right, title and interest in and to any and all patents, patents of addition, utility models, patents of importation, revalidation patents and inventor certificates which may be granted throughout the world in respect of said invention.

ALSO, ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution; and maintenance of said application or any other patent application(s) or inventor certificate(s) in the United States and in foreign countries for said inventor, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's expense, to identify and communicate to ASSIGNOR at ASSIGNOR's request documents and information concerning the invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNOR that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's heles, executors, administrators and other legal representatives.

ASSIGNOR, hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent referred to above to Assignee of the entire right, title and interest in and to the same, for Assignee's sole use and behalf, and for the use and behalf of ASSIGNEE's legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not bear made.

Inventor: Nelli Kipp Address: 319 New Kent Road Blacksburg, Virginia 24060	Signature 10/15/19/
State ofCity/County of	SSN.: 260 - 96 - 963 7 Notarization preferred but not required
Before me personally appeared and saidacknowledges this instrument to be his (her) free act and	deed this day of
Ma commission menture	Notary Public

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ASSIGNMENT

WIJEREAS, Perry Russell Rapp, whose post office addresses appear below (hereinafter referred to as ASSIGNOR), has invented certain new and useful improvements in an OBJECT-BASED NUMERIC-ANALYSIS ENGINE (hereinafter referred to as THE INVENTION) for which an application for United States Letters Patent was filed October 15, 1998, Serial Number:______;

WHEREAS, QED Innovations, whose post office address is 4013 Williamsburg Court, Fairfax Virginia, (hereinafter referred to as ASSIGNEF), is desirous of acquiring the entire right, title and interest in and to the same in the United States and throughout the world;

NOW. THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, we, ASSIGNOR, by these presents do sell, assign and transfer until said ASSIGNEE, the entire right, title and interest in and to said invention and application throughout the United States of America, including any and all United States Letters Patent granted on any division, continuation, continuation-in-part and reissue of said application; and the entire right, title and interest in and to said invention throughout the world, including the right to apply for patents and inventor certificates in respect thereof and to claim priority pursuant to rights accorded ASSIGNOR under the terms of the Paris International Convention and all other available international conventions and treaties; and the entire right, title and interest in and to any and all patents, patents of addition, utility models, patents of importation, revalidation patents and inventor certificates which may be granted throughout the world in respect of said invention.

ALSO, ASSENCE hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent application(s) or inventor certificate(s) in the United States and in foreign countries for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's expense, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's heirs, executors, administrators and other legal representatives.

ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to Issue any and all United States Letters Patent referred to above to ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE's sole use and behalf, and for the use and behalf of ASSIGNEE's legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.

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	X My - Man
inventor: Perry Russell Rapp	
Address: 48278 Keel Drive	Signature
Lexington Park, Maryland 20653	Date: 0cx 15 1998
	SSN.:
	Notarization preferred but not required
State of	
City/County of	
Before me personally appeared and said	, und
acknowledges this instrument to be his (har) free uct and	deed this day o
	Notary Public
Idi animissian arnirat	-



Before me personally appeared and said _____ acknowledges this instrument to be his (her) free act and deed this

My commission expires:

ASSIGNMENT	
WHEREAS, Evan G. Burfield, whose post office actor as ASSIGNOR), has invented certain new and useful impro ANALYSIS ENGINE (hereinafter referred to as THE INVENTION) Letters Patent was filed October 15, 1998, Serial Number:	vements in an ORIECT-BASED NUMERIC.
WHEREAS, QED Innovations, whose post office Fairfax Virginia, (hereinafter referred to as ASSIGNEE), is des interest in and to the same in the United States and throughout to	irous of acquiring the entire right title and
NOW, THEREFORE, for good and valuable con acknowledged, we, ASSIGNOR, by these presents do sell, assentire right, title and interest in and to said invention and ap America, including any and all United States Letters Paten continuation-in-part and reissue of said application; and the er invention throughout the world, including the right to apply for thereof and to claim priority pursuant to rights accorded A International Convention and all other available international right, title and interest in and to any and all patents, patent importation, revalidation patents and inventor certificates which respect of said invention.	ign and transfer until said ASSIGNEE, the plication throughout the United States of t granted on any division, continuation, after right, title and interest in and to said patents and inventor certificates in respect ASSIGNOR under the terms of the Paris conventions and treaties; and the entire its of addition, utility models patents of
ALSO, ASSIGNOR hereby agrees to execute any doctonnection with the filing, prosecution and maintenance of application(s) or inventor certificate(s) in the United States an including additional documents that may be required to affirm exention, all without further consideration. ASSIGNOR also agree assignments and communicate to ASSIGNEE's expense, to identify and communicate to ASSIGNOR information concerning the invention that are within ASSIGNOR urther assurances and testimony on behalf of ASSIGNEE that is espect of the prosecution, maintenance and defense of any position that the terms of this instrument. ASSIGNOR'S obligations assignor's heirs, executors, administrators and other legal representations.	f said application or any other patent d in foreign countries for said invention, in the rights of ASSIGNEE in and to said rees, without further consideration and at EE at ASSIGNEE's request documents and R's possession or control, and to provide awfully may be required of ASSIGNOR in atent application or patent encompassed is under this instrument shall extend to
ASSIGNOR hereby authorizes and requests the Commiss my and all United States Letters Patent referred to above to ASSI and to the same, for ASSIGNEE's sole use and behalf; and for epresentatives and successors, to the full end of the term for whilly and entirely as the same would have been held by ASSIGNO anade.	IGNEE of the entire right, title and interest return the use and behalf of ASSIGNEE'S legal ch such Letters Patent may be granted as
nventor: Evan G. Burfield Address: 9852 Fairfax Square #225 Fairfax, Virginia 22031	Signature Date: 10 15 98 SSN.: 229-23-9509 Notarization preferred but not required
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